more effective and less costly than latanoprost (25.68% vs. 24.76% IOP reduction rate, $603.08 vs. $615.33 expected cost). Thus tafluprost was shown to be dominant compared with latanoprost. The results of sensitivity analysis revealed stable across most of the included parameters. **CONCLUSIONS:** According to this study, tafluprost shows better clinical outcome for one year than latanoprost. In addition, frist-line treatment of tafluprost is a more cost-effective strategy associated with POAG or ocular hypertension compared with latanoprost.

PSS25

COST-EFFECTIVENESS OF BIOLOGIC TREATMENTS FOR MODERATE TO SEVERE PSORIASIS

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OBJECTIVES: The objective of this study was to evaluate the cost-effectiveness (CE) of biologic drugs for the treatment of moderate to severe psoriasis. **METHODS:** A CE model was developed to estimate the incremental cost per quality adjusted life-year (QALY) associated with supportive care and each biologic for the treatment of moderate to severe psoriasis (defined by 4th quartile DLQI for purposes of calculating utilities). Treatments were compared using the Psoriasis Area Severity Index (PASI) 50, 75, and 90 response rates at 10 weeks for infliximab and 12 weeks for the others, which were supported by clinical trials and an expert panel. Direct health care costs and utilities values were also included in the analysis. The CE analysis was conducted by comparing estimates of expected costs and health effects per unit of time for each treatment, incorporating both patients who 'respond' and continue treatment and those who do not 'respond' and stop treatment. All data was reviewed by a focus group in order to adapt the model to the Spanish clinical practice **RESULTS:** In the base case analysis infliximab is associated with mean expected costs of €5909 and mean expected QALYs of 0.216. Respective results were €2947 and 0.100 QALYs for etanercept 25 mg, €5433 and 0.173 QALYs for adalimumab and €7,907 and 0,151 QALYs for etanercept 50 mg. The incremental cost-effectiveness ratio (ICER) was €27,320 for infliximab, €29,430 for etanercept, €31,417 for adalimumab and €52,367 for etanercept 50 mg. **CONCLUSIONS:** First Infliximab 5 mg/kg (0,2,6 then every 8 weeks) and then etanercept 25 mg administered twice a week treatments are the most cost-effective alternatives from the Spanish National Health System perspective for the treatment of moderate to severe psoriasis, both below the €30,000/QALY threshold commonly accepted in Spain for the introduction of new technologies.

PSS26

EXPECTED VALUE OF PARTIAL PERFECT INFORMATION IN A MARKOV MODEL OF INFLIXIMAB AND ETANERCEPT IN THE TREATMENT OF MODERATE TO SEVERE PLAQUE TYPE PSORIASIS

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OBJECTIVES: The objective of the 'piggy-back' trial is to examine the cost-effectiveness of infliximab compared to etanercept in patients with **moderate to severe plaque** psoriasis or psoriasis vulgaris. Before starting the cost-effectiveness study it is usefull to know what to measure and where to invest or aim for. **The objective of this paper** is to estimate the expected value of perfect information (EVPI), with an underlying goal of estimating the partial EVPI's (EVPPI's) to make a prediction about the value of obtaining further information, for all parameters and a partial set of parameters. **METHODS:** Analysis was conducted using a Markov model for patients with moderate to severe plaque psoriasis. For estimating partial EVPI's (EVPPI's) a Monte Carlo simulation (MCS) method was used. Transition probabilities were calculated, based on published evidence, expert opinion, and demographic data. Outcomes expected were total societal costs, expected QALY's and clinical effectiveness. The analysis was performed from a partial societal perspective of The Netherlands. The outcome of partial EVPI was split into costs, utilities, success rates and dropout rates. **RESULTS:** The cost-effectiveness acceptability curve (CEAC) indicates a high decision uncertainty. The CEAC and EVPI also show infliximab needs a high willingness to pay. According to the EVPPI analysis the most uncertainty is seen in utilities (25,239 million) followed by costs (€4,216 million). Success rates and dropout rates also show a high EVPPI but much lower (around 204 and 385 million). **CONCLUSIONS:** When looking at the EVPPI's there is clearly much interest in investing in research to the utilities and the cost of treatment and little interest investing in success rates and progress rates. Because indirect costs, like costs of travel and productivity loss, are excluded and differ between the two therapies, there can be potential gain by further research to the costs.

PSS27

A COST-UTILITY ANALYSIS OF ETANERCEPT FOR THE TREATMENT OF MODERATE-TO-SEVERE PSORIASIS IN ITALY

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OBJECTIVES: Biologic therapies have proven efficacious for patients with moderate-to-severe psoriasis. However, recommended therapeutic regimens and modes of administration differ from agent to agent. For Italy, their economic value compared with standard of care has not been explored. This study estimates the cost-effectiveness of intermittent therapy with etanercept in patients with moderate-to-severe plaque-type psoriasis in comparison with non-systemic therapy in Italy. **METHODS:** This study employs cost-utility analysis using a Markov model adapted from the British "York model". It compares intermittent etanercept vs non-systemic therapy in terms of cost per Quality-Adjusted Life Year (QALY). Data on efficacy and changes in quality of life were derived from three etanercept clinical trials. Direct costs of treating psoriasis patients, including hospitalizations and dermatology clinic visits, were taken from an Italian cost-of-illness study. Extrapolations were made to evaluate the cost-effectiveness of intermittent etanercept vs non-systemic therapy over a period of ten years. **RESULTS:** For the group of patients with moderate and severe plaque psoriasis (initial Psoriasis Area and Severity Index PASI ≥ 10) the incremental cost-effectiveness ratio (ICER) for etanercept compared with non-systemic therapy was €33,216/QALY; for the group of patients with severe psoriasis (PASI ≥ 20), the ICER was €25,486/QALY. **CONCLUSIONS:** Within the Italian health care system, intermittent etanercept (25 mg twice weekly) is a cost-effective therapeutic option compared with non-systemic therapy for the group of patients with moderate and severe plaque psoriasis. For patients with PASI ≥ 20 etanercept cost-effectiveness is even greater.

PSS28

COST-EFFECTIVENESS OF USTEKINUMAB VERSUS ETANERCEPT IN SEVERE PLAQUE PSORIASIS PATIENTS: A CANADIAN PERSPECTIVE

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OBJECTIVES: To determine the cost-effectiveness of ustekinumab versus etanercept among Canadian adults with severe plaque psoriasis who have an inadequate response, are intolerant or contraindicated to at least one conventional systemic therapy. **METHODS:** The York Model, developed to evaluate biologics for the National Institute for Health and Clinical Excellence, was adapted to the Canadian environment. The model consisted of an initial 12-week trial period based on results from ACCEPT, an active-control phase III trial which demonstrated superior efficacy of ustekinumab versus etanercept. The maintenance period, consisted of the trial results extrapolated over a 10-year time horizon. The cost-utility analysis compared estimates of expected costs and health effects of ustekinumab 45 **mg q12w and etanercept 50 mg** biw for 12 weeks and qw thereafter. Response was defined as achievement of ≥PASI 75 from the ACCEPT trial. Non-responders were switched to supportive care. Resource utilization was obtained from the literature and a Delphi panel of Canadian dermatologists. Direct health care costs were obtained from the literature and expert opinion. Utility was mapped from DLQI to EQ-5D using the algorithm used by the York Model. Costs and outcomes were discounted at 5%. **RESULTS:** Mean annual costs and QALYs for ustekinumab were $16,835 and 0.1464 compared to $19,558 and 0.1419 for etanercept. These results were robust to changes in parameter estimates. Not knowing the costs of adverse events over the 10-year time horizon was a limitation of the analysis. Cost-effectiveness acceptability curves show that at all levels of willingness- to-pay for one additional unit of efficacy, ustekinumab 45 **mg remains** a more cost-effective treatment option than etanercept. **CONCLUSIONS:** Ustekinumab was more effective and less costly than etanercept over a 10-year time horizon, suggesting that ustekinumab is a dominant treatment option relative to etanercept for the treatment of patients with severe plaque psoriasis.

SENSORY SYSTEMS DISORDERS – Patient-Reported Outcomes Studies

PSS29

ADHERENCE TO ANTIGLAUCOMA DRUG TREATMENT IN NEWLY TREATED PATIENTS

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BACKGROUND: Lack of adherence to drug treatment is a major obstacle to disease control. Persistence and compliance are two components of adherence. **OBJECTIVES:** to assess: 1) the proportion of antiglaucoma medication users who persist on their treatment after 12 months; 2) the proportion of compliant users among them; and 3) the determinants of persistence and of compliance. **METHODS:** A population-based cohort study using the Quebec Health Insurance Board databases. Patients initiated on antiglaucoma medication treatment between January 1, 1998, and January 6, 2007 were included. Patients still undergoing treatment with any antiglaucoma medication 1 year after their first prescription were considered persistent. Of these patients, those with a supply of drugs for at least 80% of the days were deemed compliant. A multivariate logistic regression model using a stepwise procedure was used to identify the characteristics associated with both outcomes. **RESULTS:** Of 69,461 new users of antiglaucoma medication, 41,005 (59%) were persistent after 1 year, and 16,592 (40.5% of those who persisted) were compliant. Patients more likely to be both persistent and compliant were female and those whose first prescription was made by an ophthalmologist. Increasing age, living in a rural area, and having initiating glaucoma treatment after 2002 were associated with persistence, whereas having used more than five prescription drugs in the year preceding antiglaucoma treatment initiation was associated with better compliance. Patients initiated on sympathomimetics, parasympathomimetics, carbonic anhydrase inhibitors, beta blocking agents and on more than

one agent were less likely to persist than those initiated on a prostaglandin analog. Those initiated on parasympathomimetic, beta blocking agent or on more than one agent were less likely to be compliant. Carbonic anhydrase inhibitors users were more likely to be compliant. **CONCLUSIONS:** Among the new antiglaucoma treatment users, 24% adhered to their treatment. The initial drug influences the likelihood of both persistence and compliance.

PSS30

ETUD GLAUCOME, ETUDE TRANSVERSALE UN JOUR DANS LE GLAUCOME: ONE-DAY CROSS SECTIONAL STUDY IN GLAUCOMA

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OBJECTIVES: To assess French patient's characteristics and ophthalmologists management of glaucoma in 2009. **METHODS:** An internet cross-sectional one-day multicentre study led in France aimed at describing management of glaucoma (G)/ocular hypertension (OHT)—defined by an intraocular pressure ≥21 mm Hg, and also at assessing satisfaction and compliance. **RESULTS:** Two hundred eighty-eight ophthalmologists included 963 patients, 43.2% were male. Open-angle-glaucoma (OAG) in 71.7% and OHT in 24.3% of cases were motives for consultation. For OAG and OHT mean disease duration was respectively 9.2 ± 7.7 years and 5.0 ± 5.3 years. Mean age was respectively 58.2 ± 12.9 and 54.7 ± 12.5, mean IOP 17.5 ± 4.9 and 19.1 ± 4.2 mm Hg. Average treatment duration was 8.0 ± 7.1 years, mean number of treatment changes 2.0 ± 2.3. Previous treatment consisted in laser in 16.2% of cases, surgery 10.5%, laser plus surgery 4.6%. Medical treatment was administered in 94.0% of OAG patients and in 74.9% of OHT patients. Monotherapy was 50.7% of medical treatment, fixed association 16.4%, non-fixed associations 32.9%. In monotherapy group, beta-blockers (BB) part was 31.7%, prostaglandins (PG) 50.7% and carbonic anhydrase inhibitors CAI 5.9%. In fixed association group BB+PG were used in 72.5% of cases, BB+CAI in 20.3% and BB+ **ADR** 6.5%. Whatever is the medical treatment, changes are secondary to lack of IOP control, visual field or ocular imaging worsening, lack of tolerance, then weak compliance. Observed rates of very satisfied patients between BB group and PG are as follows: 37.2% CI95 [29.4; 45.8] vs. 28.9% CI95 [23.6; 34.9], rates of very compliant patients: 65.9% CI95 [57.4; 73.5] vs. 61% IC95 [54.7; 66.9]. **CONCLUSIONS:** This study demonstrated the large part of medical treatment in OAG/OHT. Among them PG are mostly prescribed in monotherapy or fixed association with a high level of satisfaction and compliance according physicians.

PSS31

LEVELS OF EMPOWERMENT AMONG PSORIATIC PATIENTS

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OBJECTIVES: Psoriasis is a chronic skin disorder affecting 1,5–3% of population and its cost to the society has been estimated between $600 and $900/patient/year. Prescription compliance, adherence to an appropriate follow-up program, and changes in patients everyday lives represent an essential approach to reach and maintain clinical remission. Our study wants to measure psoriasis related self-efficacy through a questionnaire specifically developed for this purpose (Psoriasis Empowerment Enquiry in the Routinely practice or PEER). **METHODS:** The study was an observational, cross-sectional survey. 240 consecutive psoriatic outpatients were asked to fill the questionnaire. The PEER is a 20-item Likert-type questionnaire and generates an overall empowerment score obtained by summing individual items; since we have defined empowerment as mastering the knowledge about psoriasis, learning from past experiences and owning skills to combine both to comply with recommendations of physicians, the PEER was conceived with 3 subscales. **RESULTS:** A total of 223 respondents were analyzed. Psoriatic patients more than 44 years old reported higher values in the overall score ($p < 0.01$) and in the skills subscale score ($p < 0.03$) while educational level didn't affect it. People suffering from psoriasis from more than one year had a higher overall ($p < 0.005$) and knowledge subscale ($p < 0.001$) scores but no significant score differences were recorded comparing the number of consultations; psoriatic arthritis cases reported higher scores ($p < 0.001$) than those affected by others psoriasis subtype. **CONCLUSIONS:** patients older than age 44, arthropathic patients or cases affected from more than one year reported higher scores reflecting a higher level of empowerment; psoriatic patients are in great need for self-management of their chronic disease. We introduce a questionnaire to survey empowerment among psoriatic patients that could represent a useful tool to evaluate the efficacy of any kind of interventions in this disabling skin disorder.

PSS32

VALIDATION AND ASSESSMENT OF MEASUREMENT INVARIANCE OF THE EYELASH SATISFACTION QUESTIONNAIRE (ESQ) IN US CANCER PATIENTS

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OBJECTIVES: This study was conducted to examine the face and content validity as well as psychometric properties of the Eyelash Satisfaction Questionnaire (ESQ) among cancer patients. Additionally, the aim was to determine whether the measurement properties were equivalent across non-cancer and cancer patients. **METHODS:** Two focus groups ($n = 15$) were conducted among cancer patients post-chemotherapy to examine the validity of the conceptual framework and test the face and content validity of the ESQ. A web survey was conducted among adults with cancer. Classical Test Theory (CTT) and latent variable modeling techniques were performed using data collected from the web survey. Confirmatory Factor Analysis (CFA), Multiple Group Structural Equation Modeling (MG-SEM), and Differential Item Functioning (DIF) were performed to examine the accuracy and stability of the three domains between non-cancer ($n = 909$) and post-chemotherapy cancer samples ($n = 595$) in the US. **RESULTS:** Qualitative analysis of the focus group discussions indicated that the conceptual framework established for cancer patients was similar to that for non-cancer patients. Additionally, support was found for the face and content validity of the ESQ. Internal consistency was found to be high across all three domains (Cronbach's $\alpha = 0.93, .90, 0.80$) and item-to-domain correlations were high (.55–.84). The factor structure of the original survey fit the cancer data well with factor loadings ranging from .64 to 93. Measurement invariance models provided good fit to the data ($NNFI = 0.97$, $RMSEA = 0.04$). Significant DIF was found between the two samples on two items but the effect sizes of the differences were small (Cohen's d's < 0.10) and substantively negligible. **CONCLUSIONS:** The research findings indicate good overall performance of the ESQ among cancer patients providing support for its use in this population. Additionally, the measurement properties between non-cancer and cancer patients were found to be equivalent.

PSS33

DEVELOPMENT OF A NEW MEASURE FOR ASSESSING HEALTH-RELATED QUALITY OF LIFE IN PATIENTES WITH PSOARIASIS: 'PSO-LIFE'

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OBJECTIVES: It is important that a questionnaire can detect impact on HRQoL when the disease is 'active' and when is not active in patients with Psoriasis. We have developed a new questionnaire where the items have been created to evaluate the impact of the disease in different phases. **METHODS:** In order to define the main dimensions, a literature review and a F.G with 5 dermatologists were performed. A semi-structured interview was conducted with 20 patients (10 with active and 10 with non active). From the content of the interviews several items were identified. Each item was subsequently rated by the dermatologist. The items were administered to a sample of 171 patients (52.1% active and 47.9% non active). A factor analysis and a Rasch analysis were performed to obtain the final pilot questionnaire before the validation study. **RESULTS:** After qualitative reduction, a 37 items questionnaire was obtained (score 0; poor HRQoL to 100; good HRQol) (PSO-LIFE 37). Factor analysis identified 6 dimensions (variance explained of 72.4%). Rasch analysis was used to exclude those items with INFIT or OUTFIT > 1.30 and <0.70 or redundant with other items. This final questionnaire (PSO-LIFE 20) has good internal consistency (Cronbach's alpha = 0.94). Comparative psychometric performance between PSO-LIFE 37 and PSO-LIFE 20 showed similar internal consistency (0.97 and 0.94), and item correlation-overall score (0.34–0.82 and 0.35–0.81). PSO-LIFE 20 showed differences ($p = 0.042$) with severity of psoriasis and between patients with active and non active disease ($p < 0.01$) (high score in patients with mild severity, and in patients with non active, which reflect good HRQoL). **CONCLUSIONS:** PSO-LIFE is a new questionnaire of 20 items, with a priori good psychometric properties though validation is needed through a formal validation process in a sample of adequate size. Preliminary results show that highest impact on HRQoL is observed in patients with active disease.

PSS34

TOOLS TO HELP DIAGNOSIS OF ATOPIC DERMATITIS: A NEED IN PUBLIC HEALTH

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BACKGROUND: The number of patients with atopic dermatitis is increasing., AD in industrialized countries concerns 5 to 20 % of children between 6&7 years old, of which nearly 10% still suffer from this disease during adulthood. Consequently; atopic dermatitis has become a true public health concern with namely difficulties in diagnosis and patient's management. **OBJECTIVES:** In order to rapidly and effectively refer patients with AD to dermatologists or paediatricians, our work has aimed at designing and validating a questionnaire of presumed diagnosis of AD **METHODS:** This questionnaire was designed and based on a large review of international scientific literature, in particular from articles about diagnosis criteria by Hanifi and Rajka and the UK Working Party, interviews of experts and a series of structured interviews of patients with AD of different levels of severity, hence forming a rich and structured verbatim. **RESULTS:** A questionnaire, using simple vocabulary, and comprising 20 questions, has been designed. Answers to each question are dichotomic; the subject answering either « yes » or « no », so as to prevent any confusion. During test phase, it was found necessary to add « do not know »as a possible answer. 8 questions focus on the medical history of the patient and his/her family (parents and brothers/sisters), 2 questions dealt with difficulties in getting to sleep as well as the quality of sleep, 9